

GENERAL NOTES

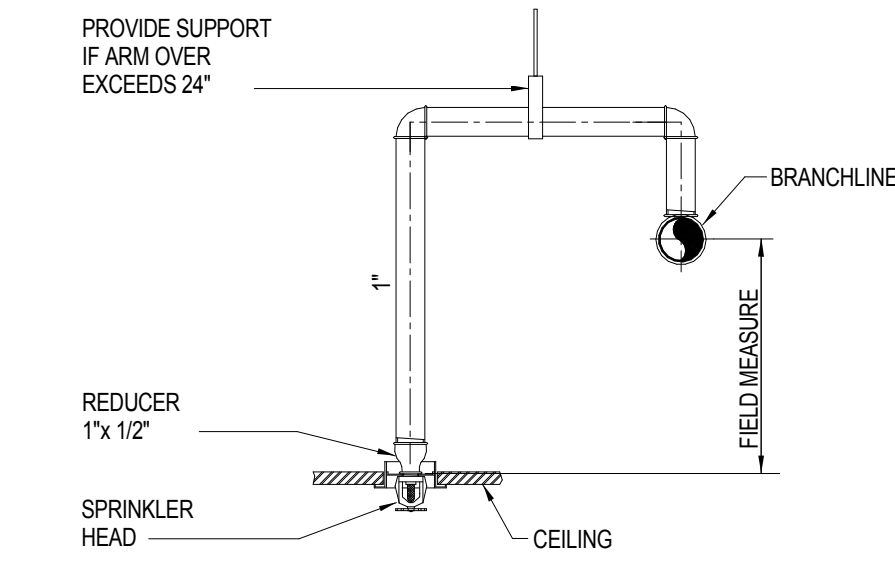
1. FIRE PROTECTION SPRINKLER INSTALLATION SHALL MEET THE REQUIREMENTS OF THE FOLLOWING:
- A. NFPA 13 AND 14, 2013 ED.
B. LOCAL AND STATE REGULATIONS AND IBC 2012 ED.
C. DVA FIRE PROTECTION MANUAL, SIXTH ED.; REVISED SEPTEMBER 2011
2. SPRINKLER HEADS SHALL BE FM APPROVED QUICK RESPONSE IN ALL AREAS EXCEPT WHERE SPECIFICALLY PROHIBITED, IN COMPLIANCE WITH VA GUIDELINES AND NFPA REQUIREMENTS.
3. SPRINKLERS THROUGHOUT THE BUILDING TO BE ORDINARY TEMPERATURE RATED EXCEPT FOR ELECTRICAL ROOMS/CLOSETS, HEADS LOCATED WITH 1' OF AUTOCLAVES AND CAGEWASHER SHALL BE INTERMEDIATE TEMPERATURE RATED AND MECHANICAL ROOMS TO BE PROVIDED WITH HIGH TEMPERATURE RATED HEADS.
4. SPRINKLER PIPE SIZES AND SPRINKLER HEAD LOCATIONS SHALL CONFORM TO NFPA REQUIREMENTS. SPRINKLER HEADS INDICATED ON DRAWINGS ARE FOR DESIGN COORDINATION AND BUDGETARY PRICING ONLY.
5. PIPE HANGERS INCLUDING SEISMIC PROTECTION TO BE INSTALLED AS REQUIRED BY N.F.P.A. FOR SUPPORTING SPRINKLER PIPING. NO OTHER PIPING AND/OR DEVICES ARE TO BE ATTACHED TO THE SPRINKLER PIPE.
6. PIPING SHALL NOT BE LOCATED IN ANY ELECTRICAL ROOMS/CLOSETS OR TELECOMMUNICATION ROOMS/CLOSETS UNLESS THOSE PIPES SERVE ONLY THAT SPACE.
7. ALL SPRINKLER PIPE TO MAINTAIN A 6'-0" MIN VERTICAL CLEARANCE FROM TOP OF ELECTRICAL CONTROL PANELS & SWITCHGEAR/TRANSFORMERS.
8. PROVIDE SPRINKLER ZONE FLOOR CONTROL VALVE ASSEMBLY CONSISTING OF CONTROL VALVE, CHECK VALVE, FLOW SWITCH, SELF-CONTAINED TEST AND DRAIN ASSEMBLY AND PRESSURE GAGE, ON THE SPRINKLER MAIN BRANCH SERVING EACH FLOOR.
9. INSTALL PIPING SO THAT VALVES ARE ACCESSIBLE AND STEMS EXTEND VERTICALLY UP. ALL CONTROL VALVES SHALL BE EQUIPPED WITH TAMPER SWITCHES.
10. ALL WATER FLOW SWITCHES MUST BE ISOLATED BY MEANS OF A FITTING OR UNION ON BOTH SIDE TO FACILITATE REMOVAL AND SERVICE OF THE FLOW SWITCH.
11. THE FIRE PROTECTION CONTRACTOR SHALL PROVIDE THE QUANTITY OF SPRINKLER HEADS AS REQUIRED TO MAINTAIN THE MINIMUM COVERAGE REQUIRED BY NFPA 13.
12. COORDINATE THE EXACT LOCATION OF ALL SPRINKLER HEADS, PIPING, EQUIPMENT, AND DEVICES WITH ARCHITECTURAL DRAWINGS AND THE RESPECTIVE DRAWINGS OF PIPING, DUCTWORK, DIFFUSERS, BEAMS, LIGHTS, ETC. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF THESE COMPONENTS IN THE FIELD.
13. PROVIDE COMPLETE AND FUNCTIONAL FIRE PROTECTION SYSTEMS FOR THE PROJECT. THE SYSTEMS SHALL CONFORM TO THE SPECIFICATIONS AND AS SHOWN ON DRAWINGS. ITEMS OR WORK NOT SHOWN OR SPECIFIED, BUT REQUIRED FOR COMPLETE SYSTEMS, SHALL BE PROVIDED AND CONFORM TO ACCEPTED TRADE PRACTICES. THE DRAWINGS AND SPECIFICATIONS ARE PRESENTED TO DEFINE SPECIFIC SYSTEM REQUIREMENTS AND SERVE TO EXPAND ON THE PRIMARY CONTRACT REQUIREMENTS OF PROVIDING COMPLETE SYSTEMS. THE DRAWINGS ARE DIAGRAMMATIC AND INDICATE THE GENERAL ARRANGEMENT AND ROUTING OF THE SYSTEMS INCLUDED IN THIS CONTRACTORS WORK.
14. THESE DRAWINGS WERE PREPARED FROM INFORMATION TAKEN FROM THE ORIGINAL BUILDING DRAWINGS AND FIELD SURVEY INFORMATION COMPILED BY THE ENGINEERING DESIGN TEAM FOR THE PURPOSE OF ENGINEERING DESIGN CONCEPT. EXISTING CONDITIONS ARE SHOWN AS ACCURATELY AS POSSIBLE. THERE IS THE POSSIBILITY THAT CONDITIONS SHOWN ARE NOT EXACTLY AS EXISTING. CONTRACTOR SHALL VERIFY ALL DIMENSIONS, ELEVATIONS, LOCATIONS, SIZES AND CONDITIONS AT THE SITE AND REPORT ANY DISCREPANCIES TO THE ARCHITECT PRIOR TO BEGINNING INSTALLATION OR FABRICATION WORK.
15. THE CONTRACTOR WILL BE RESPONSIBLE FOR ENSURING THAT ALL RULES AND REGULATIONS, INCLUDING THOSE WHICH MAY BE ISSUED BY THE OWNER, ARE BEING OBSERVED, PARTICULARLY WORKPLACE SAFETY AND THE CONDUCT OF ALL THOSE EMPLOYED DIRECTLY AND INDIRECTLY BY HIM ON THE PREMISES, AND THE OWNERS EMPLOYEES WHO MAY BE IMPACTED OR AFFECTED BY CONSTRUCTION ACTIVITIES. THE CONTRACTOR WILL INSTALL SIGNAGE, BARRIERS, AND OTHER MEANS TO PROVIDE WARNING AND PERSONNEL SAFETY. PLACEMENT OF THESE ITEMS WILL BE COORDINATED WITH THE OWNER AND HIS ONGOING OPERATIONS AND WILL PROMPTLY BE REVISED WHEN WORK IN A PARTICULAR AREA HAS BEEN COMPLETED.
16. CONTRACTOR SHALL MAKE ALL NECESSARY SUBMISSIONS AND OBTAIN ALL NECESSARY PERMITS AND APPROVALS PRIOR TO STARTING FABRICATION AND CONSTRUCTION.

FIRE PROTECTION DESIGN CRITERIA

1. SYSTEM TYPE, WET PIPE
2. SPRINKLER HEAD SPACING AND PIPE SIZING SHALL BE:
- a. TOILET ROOMS AND PATIENT AREAS, LIGHT HAZARD (0.10 GPM/SQ.FT. OVER 1500 SQ.FT., 225 SQ.FT. PER SPRINKLER HEAD)
b. MECHANICAL ROOMS AND ELECTRIC CLOSETS, ORDINARY GROUP 1 HAZARD (0.15 GPM/SQ.FT. OVER 1500 SQ.FT., 130 SQ.FT. PER SPRINKLER HEAD)
c. STORAGE ROOMS, ORDINARY GROUP 1 HAZARD (0.20 GPM/SQ.FT. OVER 1500 SQ.FT., 130 SQ.FT. PER SPRINKLER HEAD)
d. EXTENDED COVERAGE SPRINKLERS MAY BE USED IN AREAS WHERE INSTALLATION OF STANDARD SPRINKLER COVERAGE CAN NOT BE MAINTAINED DUE TO CEILING MOUNTED EQUIPMENT AND FIXTURES.
3. PROVIDE FOR AN ADDITIONAL WATER ALLOWANCE TOTAL OF 250 GPM FOR INSIDE AND OUTSIDE HOSE STREAMS TO THE SPRINKLER HYDRAULIC REQUIREMENTS.
4. THE CALCULATED DEMAND INCLUDING HOSE STREAM REQUIREMENTS SHALL FALL NO LESS THAN 10 PERCENT BELOW THE AVAILABLE WATER SUPPLY.
5. SYSTEM SHALL BE DESIGNED ON A HYDRAULICALLY CALCULATED BASIS UTILIZING THE AREA DENSITY METHOD PER THE NFPA 13 BY THE SPRINKLER CONTRACTOR. CALCULATIONS AND SHOP DRAWINGS SHALL BE SIGNED AND SEALED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF PENNSYLVANIA.
6. SPRINKLERS THROUGHOUT THE BUILDING TO BE ORDINARY TEMPERATURE RATED EXCEPT FOR ELECTRICAL ROOMS/CLOSETS, AND MECHANICAL ROOMS TO BE HIGH TEMPERATURE RATED HEADS.
7. SPRINKLER PIPE SIZES SHALL BE DETERMINED BY HYDRAULIC CALCULATIONS BASED ON EXISTING FIRE PUMP HYDRAULIC FLOW TEST DATA (SEE VAMC-HUNTINGTON FOR CURRENT PUMP TEST DATA):
- DATE - SEPTEMBER 28, 2013
 - SUCTION PRESSURE - 02 PSIG
 - DISCHARGE PRESSURE - 140 PSIG
 - RATED FIRE PUMP FLOW - 500 GPM

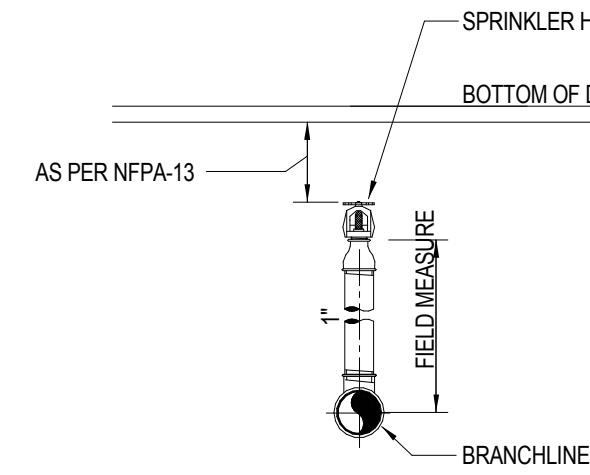
LEGEND

EXISTING	ABV CLG - ABOVE THIS CEILING
EXISTING TO BE REMOVED	BLW FLR - BELOW THIS FLOOR
FIRE PIPING	(E) - EXISTING
SPRINKLER PIPING	EC - ELECTRICAL CONTRACTOR
SPRINKLER DRAIN PIPING	FC - FIRE PROTECTION CONTRACTOR
CHECK VALVE	PC - PLUMBING CONTRACTOR
CONTROL VALVE	FHV - FIRE HOSE VALVE
INSPECTORS TEST FITTING	FDC - FIRE DEPARTMENT CONNECTION
PRESSURE GAUGE	SPR - SPRINKLER
GROUND FACE UNION OR FLANGES	
WATERFLOW SWITCH	
TAMPER SWITCH	
UPRIGHT SPRINKLER HEAD	
RECESSED PENDENT SPRINKLER HEAD	
SIDEWALL SPRINKLER HEAD	
SPRINKLER ZONE/SMOKE WALL	
REFER TO ARCHITECTURAL DRAWINGS FOR WALL RATING / TYPE SYMBOLS	



2 TYPICAL DROP PENDENT DETAIL

NOT TO SCALE

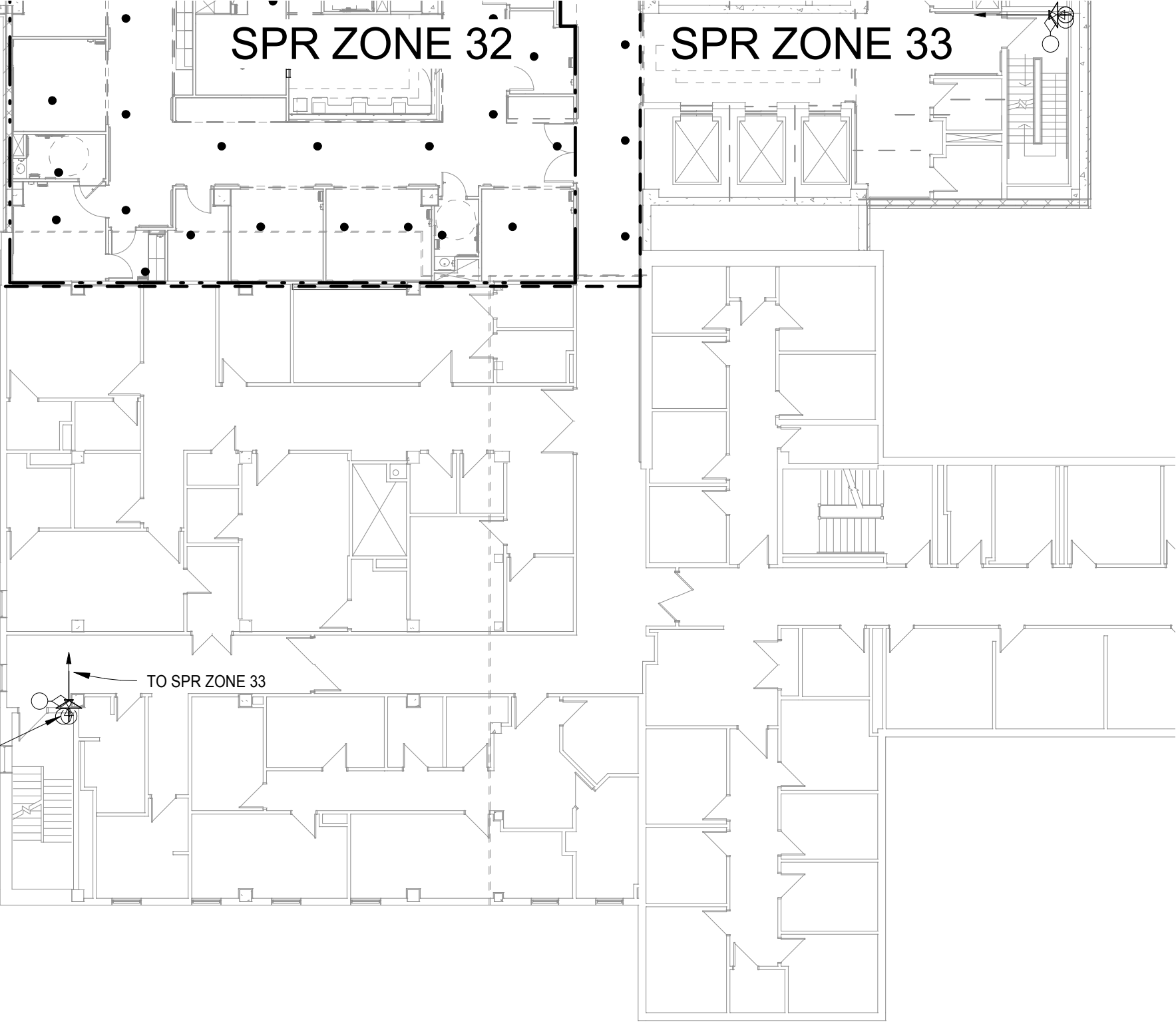


1 TYPICAL UPRIGHT/SPRIG DETAIL

NOT TO SCALE

3 BASEMENT PLAN

1/16" = 1'-0"
FINISH FL E.L. - 872'-0"

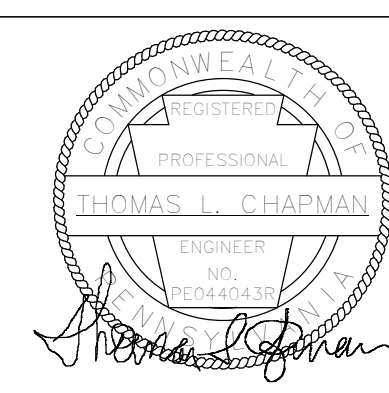


4 3RD FLOOR PLAN BLDG 1A

1/16" = 1'-0"

CONSULTANTS:

MILLER-REMICK CORPORATION
PROFESSIONAL ENGINEER



ARCHITECT / ENGINEERS:



Drawing Title

**FIRE
GENERAL NOTES, LEGEND AND DETAILS**

Approved: Medical Center Director

Project Title

**RENOVATE SURGICAL
SERVICE & UPGRADE
OPERATING ROOMS**

Location **HUNTINGTON, WV**

Date **10.31.2014**

Checked **MP**

Drawn **PD**

Project Number

581-13-101

Building Number

1S

Drawing Number

FX0.01

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Office of
Construction
and Facilities
Management

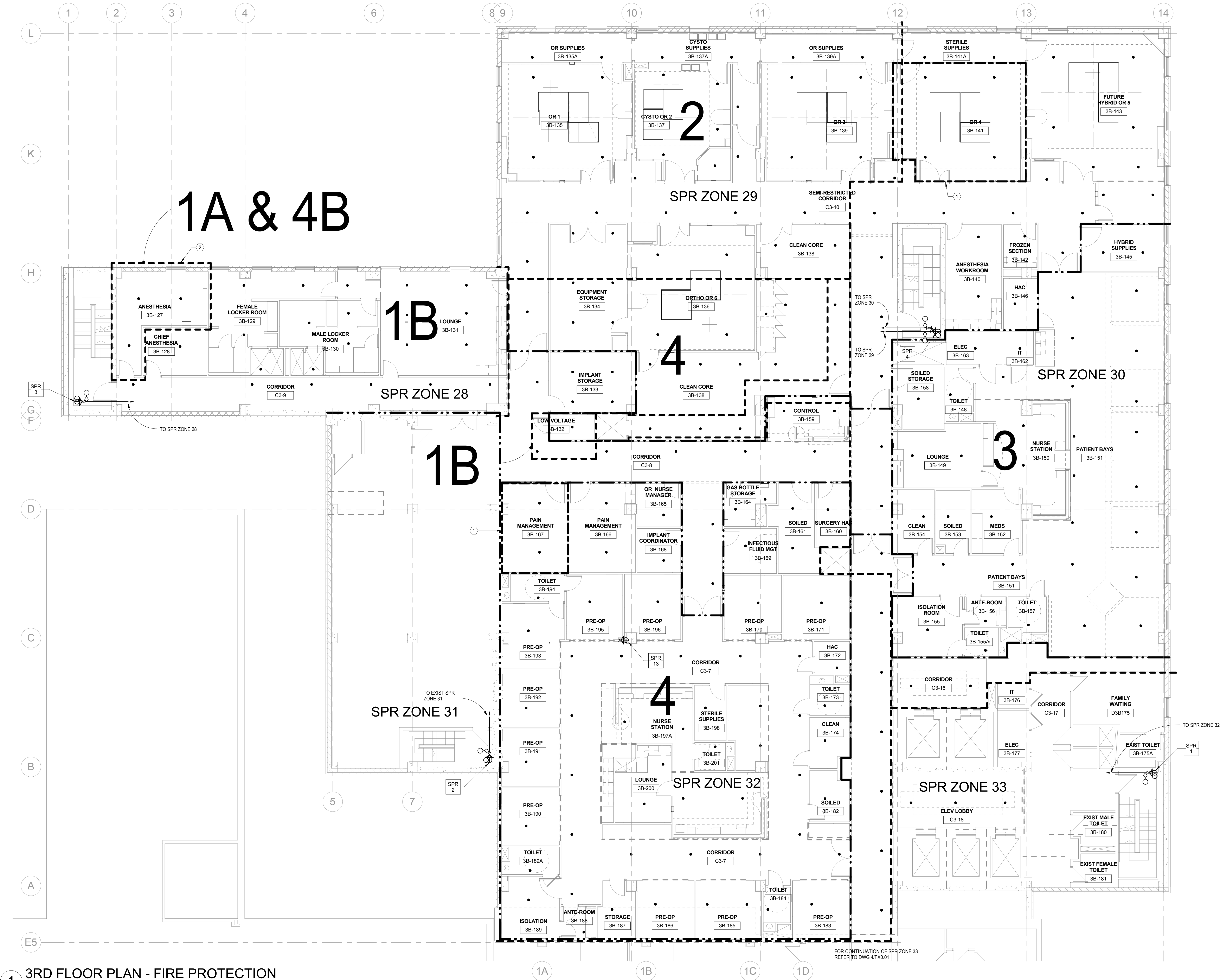


GENERAL SHEET NOTES:

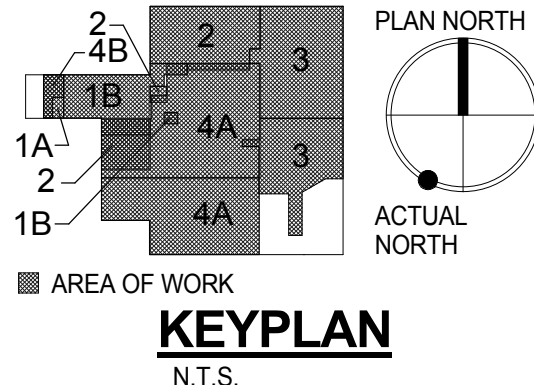
1. REFER TO DRAWING FX0.01 FOR SYMBOLS LEGEND, GENERAL NOTES AND DETAILS.
2. REFER TO DRAWINGS 3FX0.01 FOR EXISTING STANDPIPE/SPRINKLER RISER SUPPLY PIPING.

SHEET KEYNOTES:

1. PROVIDE UPRIGHT SPRINKLER HEADS IN SHELLD ROOMS 3B-141 AND 3B-167 TO BE FIT OUT IN FUTURE AS INDICATED.
2. PROVIDE UPRIGHT SPRINKLER HEADS IN TEMPORARY GAS CYLINDER ROOM IN PHASE 1A UNTILL COMPLETION OF NEW GAS CYLINDER ROOM IN PHASE 4. ONCE NEW GAS CYLINDER ROOM IS IN OPERATION PROVIDE PENDENT SPRINKLER HEADS IN ANESTHESIA ROOM.



1 3RD FLOOR PLAN - FIRE PROTECTION
1/8" = 1'-0"
FINISH FL EL. - 922' - 4"

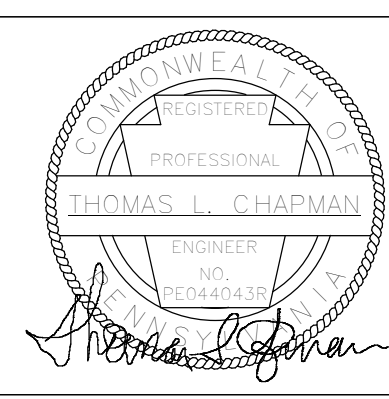


100% CONSTRUCTION DOCUMENTS
FULLY SPRINKLERED

NO.	DESCRIPTION	DATE

CONSULTANTS:

MILLER-REMICK CORPORATION
PROFESSIONAL ENGINEER



ARCHITECT / ENGINEERS:



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www.pfa-architect.com

Drawing Title
FIRE
FIRE PROECTION PLAN

Approved: Medical Center Director

Project Title
RENOVATE SURGICAL
SERVICE & UPGRADE
OPERATING ROOMS

Location HUNTINGTON, WV

Date
10.31.2014

Checked
MP

Drawn
PD

Project Number
581-13-101

Building Number
1S

Drawing Number
FX1.01

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Office of
Construction
and Facilities
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